Sensors Directorate Team Wins 1999 FLC Award for Excellence in Technology Transfer

Payoff

To date, over $5 million has been invested by both government and industry for the successful transfer of the Air Force Research Laboratory's (AFRL's) patented thermally-shunted heterojunction bipolar transistor (TSHBT) technology to industry.

Accomplishment

The Federal Laboratory Consortium (FLC) selected a team of engineers from the AFRL Sensors Directorate (SN) to receive its Award for Excellence in Technology Transfer for 1999. This award recognizes the Directorate's work on heterojunction bipolar transistor (HBT) circuits for high reliability dual-use applications. The FLC presents its Award for Excellence to federal laboratory employees who have done outstanding work toward the development of military technology, as well as, facilitating the commercial use of that technology through the technology transfer program.

Background

The 13-member team of engineers from SN is an established center-of-excellence for the development of electron devices and the transfer of technology to industry. They have been especially active in microwave HBT research by developing and demonstrating a variety of improvements, including a breakthrough in HBT thermal management. The hard work of each of these SN engineers resulted in the successful transfer of AFRL's patented TSHBT technology to industry, particularly to Northrop Grumman's Electronic Sensors and Systems Division. Additional applications include Air Force military systems, such as phased array radar, electronic warfare and communication systems, and commercial applications for wireless communications. This team also shattered the world record for microwave power density. Since that time, they have solved many problems that have historically plagued industry's HBTs.